## **ABSTRACT**

A polyimide resin having a basic skeleton represented by the following general formula:

[Formula 1]

$$\left\{
\begin{array}{c|c}
O & O \\
N & O \\
N & O
\end{array}\right. N - Ar^{3} \left.
\left.
\left.
\right.
\right.
N - Ar^{3} \left.
\left.
N - Ar^{3} \left.
\left.
\right.
N -$$

(in the formula (1), each of Ar<sup>1</sup> and Ar<sup>2</sup> is an aromatic ring having a carbon number of 6-20, which forms an imide ring of 5 or 6 atoms with an imide group adjoining thereto. In the aromatic ring, a part of carbon atoms may be substituted with S, N, O, SO<sub>2</sub> or CO, or a part of hydrogen atoms may be substituted with an aliphatic group, a halogen atom or a perfluoro aliphatic group. Ar<sup>1</sup> and Ar<sup>2</sup> may be same or different. R is at least one of linear alkylene group and branched alkylene group having a carbon number of 1-20. Ar<sup>3</sup> is an aromatic ring having a carbon number of 6-20 in which at least a part of hydrogen atoms is substituted with at least one of sulfoalkoxy group, carboalkoxy group and phosphoalkoxy group having a carbon number of 1-20 and a part of carbon atoms in these groups may be substituted with S, N, O, SO<sub>2</sub> or CO, or a part of hydrogen atoms may be substituted with an aliphatic group, a halogen atom or a perfluoro aliphatic group. n and m show a polymerization degree and are an integer of not less than 2.)